Title (en)

Method and system for monitoring and controlling characteristics of the heat affected zone in a weld of metals

Title (de)

Verfahren und System zur Überwachung und Steuerung der Eigenschaften der Wärmeeinflusszone beim Schweissen von Metallen

Title (fr)

Procédé et système pour observer et contrôler les charactéristiques de la zone affectée par la chaleur durant la soudure de métaux.

Publication

EP 1782911 A3 20071031 (EN)

Application

EP 06022557 A 20061028

Priority

US 26672105 A 20051103

Abstract (en)

[origin: EP1782911A2] Method and system for monitoring and controlling at least one of the plurality of quantifiable heat affected zone ("HAZ") characteristics in a weld of metal pieces provides a user with information concerning at least a first quantifiable HAZ characteristic for a weld, and also provides for control of an operating condition of a welding apparatus to obtain a weld having a quantifiable HAZ characteristic that satisfies success criteria relating to performance of the fabricated component.

IPC 8 full level

B23K 31/00 (2006.01); **B23K 31/12** (2006.01)

CPC (source: EP KR US)

B21C 37/08 (2013.01 - KR); **B23K 13/025** (2013.01 - KR); **B23K 13/08** (2013.01 - KR); **B23K 31/00** (2013.01 - EP US); **B23K 31/12** (2013.01 - EP KR US); B23K 2101/04 (2018.07 - KR); B23K 2101/10 (2018.07 - KR)

Citation (search report)

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- [A] WO 0124966 A1 20010412 - CATERPILLAR INC [US]
- [A] EP 0512972 A2 19921111 - CENTRE RECH METALLURGIQUE [BE]
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Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK YU

DOCDB simple family (publication)

EP 1782911 A2 20070509; **EP 1782911 A3 20071031**; AR 056167 A1 20070919; AU 2006233266 A1 20070517; AU 2006233266 B2 20081030; AU 2006233266 C1 20090430; BR PI0604521 A 20070828; CA 2564255 A1 20070503; CN 1959566 A 20070509; JP 2007144515 A 20070614; KR 100857048 B1 20080905; KR 20070048125 A 20070508; KR 20080053271 A 20080612; MX PA06012464 A 20070502; TW 200732074 A 20070901; TW I302483 B 20081101; US 2007095878 A1 20070503

DOCDB simple family (application)

EP 06022557 A 20061028; AR P060104811 A 20061102; AU 2006233266 A 20061030; BR PI0604521 A 20061101; CA 2564255 A 20061017; CN 200610143682 A 20061102; JP 2006298128 A 20061101; KR 20060108417 A 20061103; KR 20080052660 A 20080604; MX PA06012464 A 20061027; TW 95138431 A 20061018; US 26672105 A 20051103